

IDAHO DEPARTMENT OF FISH & GAME

Jerry M. Conley, Director

Sandpoint Hatchery

Annual Report



October 1, 1979 - 30 September, 1980

by

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Sandpoint Hatchery

ABSTRACT

The 1980 fish year was quite successful at the Sandpoint Hatchery.

With a total of 385,868 cutthroat, brown and brook trout on hand at the beginning of the year, a total of 2,648 pounds were produced.

A total of 983,854 cutthroat, brown and brook trout eggs were either taken or received.

No major disease outbreaks occurred during the year.

There were 606,813 cutthroat, brown and brook trout released into streams and lakes, most of them in Region 1. Some 242,178 Westslope cutthroat were transferred to the Mullan Hatchery.

At the end of the fish year a total of 383,671 fish were on hand. They were cutthroat, brook trout and kokanee salmon.

The inside of the hatchery building was insulated and painted. Two electric heaters were installed.

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OBJECTIVES

1. Raise and release an average of 1,010 pounds of 0-4 inch cutthroat per year. We release them in Hayden Creek and Rochat Pond. An average number is 303,306 cutthroat per year.
2. Raise and release an average of 1,013 pounds of 0-6 inch Eastern brook trout per year. We release them in McArthur Reservoir, Mirror Lake, Henrys Lake and Beaver Lake, an average of 198,587 brook trout per year.
3. Raise and release an average of 416 pounds of 0-4 inch kokanee per year. We release in Granite Creek, a tributary to Pend Oreille Lake, an average of 683,097 kokanee per year.

INTRODUCTION

Sandpoint Hatchery is located **in** Bonner County, 5 miles south of Sandpoint on the Pend Oreille River. The Sandpoint Hatchery receives its water supply from springs. The water is piped in from springs located approximately 4/10 of a mile south of the hatchery. The Sandpoint Hatchery has 1.2 cfs of water available to use. We have two 5 foot x 100 foot raceways and are capable of raising 7,275 pounds of yearling fish; however, most of the production is now taken up by about 300,000 cutthroat at 230 per pound.

FISH PRODUCTION

Sandpoint Hatchery received the following eggs:

MONTH OF DECEMBER 1979

We received 305,088 brook eggs from the Ford Hatchery in Washington state, from domestic broodstock. The eggs hatched well although they were small at 454 per ounce.

MONTH OF DECEMBER 1979

We received 164,450 brown eggs from Plymouth Rock Trout Company in Massachusetts, from domestic broodstock. There was very little loss through hatching.

MONTH OF DECEMBER 1979

We received 210,600 brown eggs from the National Fish Hatchery in Crawford, Nebraska, from semi-domestic broodstock. We had about a 5% hatching loss.

MONTH OF APRIL 1980

We received 119,250 cutthroat eggs from Henrys Lake. The eggs were extremely soft, and we had a 20% loss due to premature hatch.

MONTH OF APRIL AND MAY 1980

We received 158,705 green cutthroat eggs from the Hayden Creek trap. They were very good quality eggs and we lost only about 10% through hatching.

MONTH OF MAY AND JUNE 1980

We received 25,761 more green cutthroat eggs from the Merwin trap on Kerr Lake. Most of these eggs were overripe when taken and only about 25% of these eggs hatched.

Stock History

The only eggs that we have any information on pertaining to stock history would be the Henrys Lake cutthroat eggs and the Westslope cutthroat eggs.

Cutthroat were native to Henrys Lake. This certain stock has been hybridized several times with rainbow trout. Cutthroat eggs from Yellowstone Lake have been introduced to Henrys Lake.

The Westslope cutthroat eggs come originally from Granite Creek in Washington state, near the Idaho border, above Priest Lake. They were planted in Kings Lake, Washington from which we obtained our eggs, 118,000 in 1975 and 108,000 in 1976.

Fish Produced

The Hatchery produced a total of 1,030,442 fish in 1980 that weighed 2,338 pounds of these totals:

Cutthroat	399,52	932 pounds
Brooks	242,26	1,329
Browns	316,41	357
Rainbow & Cutthroat	72,442	30

At the beginning of the fish year 1980 we had the following fish on hand:

Westslope Cutthroat	355,856	1,022 per
Kokanee	6,640	277
Brook	23,372	100

At the end of the fish year 1980 we had the following fish on hand:

Westslope Cutthroat	360,69	844 per pound
Brook	16,994	162
Kokanee	5,983	16

FISH HEALTH

We had no disease problems, either major or minor.

The incidental mortality on Westslope cutthroat, brown and brook were above normal, because of overcrowding.

The following is a list of mortalities, by species, on the highest total amount of fish on hand:

Size	Fish	Total	Loss	No. Months held
0-3 inches	Henrys Lake Cutthroat	77,720	13,296	4
0-3 inches	Westslope Cutthroat	360,456	101,278	12
0-3 inches	Brown Trout	301,925	82,080	8
3-6 inches	Kokanee Salmon	6,670	687	12
0-3 inches	Brown Trout	274,588	67,210	8
0-6 inches	Brown Trout	23,602	7,143	6

All fish were in good to excellent condition at the time of release.

The percent of eye-up on the Westslope cutthroat taken at Hayden Creek was 86%. The percentage taken from Kerr Lake was 37%.

Percentage of Hatch

The percentage of brown eggs received from Plymouth Rock, Massachusetts was 99%. The percentage of brook trout eggs received from Ford, Washington was 92%. The percentage of Henrys Lake cutthroat eggs received from Henrys Lake was 64%. The percentage on Westslope cutthroat eggs received from Hayden Creek was 93%. All of the above were through the hatching process.

The high loss on the Henrys Lake eggs were due to premature hatch, caused by very soft shells.

FISH TRANSFERS

Some 242,178 0-3 inch Westslope cutthroat were transferred to the Mullan Hatchery in April and May, which averaged 330 fish to the pound.

FISH RELEASES

The following releases were made from Sandpoint Hatchery during the fish year:

Brook trout:

McArthur Reservoir - 29,792 3-6 inch brook were released in April.
Perkins Lake - 6,860 3-6 inch brook were released in April.
McArthur Reservoir -123,172 0-3 inch brook were released in May.
Henrys Lake - 82,503 0-3 inch brook were released 16 September.

Brown trout:

East River, a tributary to Priest River, was planted with 263,779 0-3 inch brown trout in May and June.

Brown trout in the Palouse River numbering 20,905 0-3 inch, were released 19 September.

Henrys Lake cutthroat were planted **in** the following mountain lakes:

Ball, Little Ball, and Queen - 8,890 0-3 inch fish. These plants were made in June and July.

Henrys Lake - 70,912 Henrys Lake cutthroat were released 16 September.

We only planted 3 mountain lakes this last year, which saved many backcountry miles, and a considerable amount of gasoline. The Cutthroat allocated for mountain lakes go back to Henrys Lake.

FISH FEED UTILIZATION

The only fish feed used was Oregon Moist Pellets, Formula II.

We fed a total of 3,790 pounds at a total cost of \$1,271.00. The breakdown of pounds per size is as follows:

Starter Mash	--	40 pounds
1/32	--	700
3/64	--	1,250
1/16	--	500
3/32	--	1,150
1/8	--	100
1/4	--	50
Total		3,790 pounds

The pounds of feed per pound of fish produced was 1.62, the fish feed cost per pound of fish produced was \$.544.

HATCHERY IMPROVEMENTS

Hatchery Building:

We installed two 10 kw heaters in the hatchery building in October 1979. By December the construction crew had finished putting in 1 inch insulation panels on the inside of the building. During March and April, with the help of two CETA workers, I got the exposed steel beams scraped and painted. In June Loyd Bristol painted the inside of the hatchery building. The place looks 100% better and we don't have to wear winter coats and ear muffs to work in there.

Water Line:

During the year one CETA worker and I dug up and replaced 125 feet of rusted water line. This was between the pumphouse and the Superintendent's house. The old 3/4 inch was leaking badly and making the pump run excessively. It required 10 man-days to accomplish the work.

Weed Control:

One CETA worker spent about 30 man-days on "Tanzy" weed control through the summer. We used a hand held, gasoline powered weed cutter. Mel Branch brought over a tractor mounted brush cutter. He cut down 3 acres of the pesky weed in one day.

SPECIAL STUDIES

TERRAMYCIN (TM50) EXPERIMENTS:

Six lots of kokanee, 2,000 per pound, 200 fish in each lot were held in 6 fine screen pens. They were fed TM 50 at 12% in the following manner over a two-month period:

Lot #1: 2 days on TM 50, 5 days on regular feed Lot

#2: 2 days on TM 50, 10 days on regular feed Lot

#3: 4 days on TM 50, 5 days on regular feed

Lot #4: 4 days on TM 50, 10 days on regular feed

Lot #5: 8 days on TM 50, 10 days on regular feed

Lot #6: Only regular feed the whole time

The results of those tests did not show distinct ring marks on the bones as we had hoped. Hopefully we can try again next year, over a longer period of time.

We also held over about 3,000 year old kokanee. These fish were periodically tested to see if the marks on the bones, made by the TM 50 fed at the fry stage were still visible. All tests were positive.

MISCELLANEOUS ACTIVITIES

Between 12 December and 7 August, 250,000 Westslope cutthroat and 82,000 brook trout were adipose fin clipped. Most of the work was done by 6 CETA employees. They spent approximately 1,920 working hours to fin clip a total of 332,000 fish.

The brooks were clipped in August and September and were 267 per pound when finished.

HATCHERY NEEDS

The two outside raceways measuring 5 feet wide by 100 feet long need major repair. The bottoms and sides are so eroded, cracked and chipped that they are almost impossible to clean, especially when small fry are reared in them.

ACKNOWLEDGMENTS

Hatchery staffing during the fish year included:

Bill Carter, Fish Hatchery Superintendent I, fulltime.

Gerri Hoffman, YACC employee from April 4 through September 27.

Larry Fox, CETA employee from February 15 through August 8.

Mary Jutila, CETA employee from February 15 through February 29.

Russell Harding, CETA employee from March '3 through March 30.

Ira Kline, CETA employee from February 15 through March 28.

Gene Mistelski, CETA employee from December 30 through January 25.

Joe Poe, CETA employee from December 12 through February 1.